

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

City of Sacramento

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	3.67	09/15/2016 09/15/2016	Oleg Yakimov

LM Start		Rating **	A	Issue No.	20
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_NA0005_01_s _ 2013_20				
Comment Code					
Inspector Comment					
City of Sacramento has copies of the levee O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	22
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_NA0005_01_s _ 2013_22				
Comment Code					
Inspector Comment					
City of Sacramento maintains a stockpile of Flood Fight response material.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

City of Sacramento

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	3.67	09/15/2016 09/15/2016	Oleg Yakimov

LM Start		Rating **	A	Issue No.	23	
LM End		Issue Type +	Ma	Location *	N/A	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Flood Preparedness & Training				°	
					°	
DWR ID	DWR_NA0005_01_s_2013_23					
Comment Code						
Inspector Comment						
City of Sacramento has a written response plan and regular response training.						

No Photos

LM Start	1.16	Rating **	M	Issue No.	13
LM End	1.69	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.574780 °	38.568757 °
				-121.510191 °	-121.515930 °
DWR ID	DWR_NA0005_01_f_2012_13				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

Photo 1 of 2 : FA_2016_NA0005_251_13_20160913_00010.jpg



Monitor trees and woody vegetation along the rivers edge looking downstream. Fall 2015.

LM Start	1.16	Rating **	M	Issue No.	13 (cont)
LM End	1.69	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2016_NA0005_251_13_20160913_00011.jpg



Monitor the trees and woody vegetation along the rivers edge. Fall 2013

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
--	--	---	--	---	--

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

City of Sacramento

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	3.67	09/15/2016 09/15/2016	Oleg Yakimov

LM Start	1.25	Rating **	M	Issue No.	75
LM End	1.25	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.573704 °	38.573704 °
				-121.511219 °	-121.511219 °
DWR ID	DWR_NA0005_01_f_2016_75				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_NA0005_251_75_20160915_00115.jpg



View of rodent holes on waterward side of the levee. Fall 2016 inspection.

LM Start	1.29	Rating **	M	Issue No.	76
LM End	1.29	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.573240 °	38.573240 °
				-121.511707 °	-121.511707 °
DWR ID	DWR_NA0005_01_f_2016_76				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_NA0005_251_76_20160915_00116.jpg



Rodent hole backfilled with natural soil on waterward side of the levee. Fall 2016 inspection.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

City of Sacramento

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	3.67	09/15/2016 09/15/2016	Oleg Yakimov

LM Start	1.31	Rating **	M	Issue No.	1
LM End	1.39	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.573169°	38.572277°
				-121.511998°	-121.513063°
DWR ID	DWR_NA0005_01_s_2016_1				

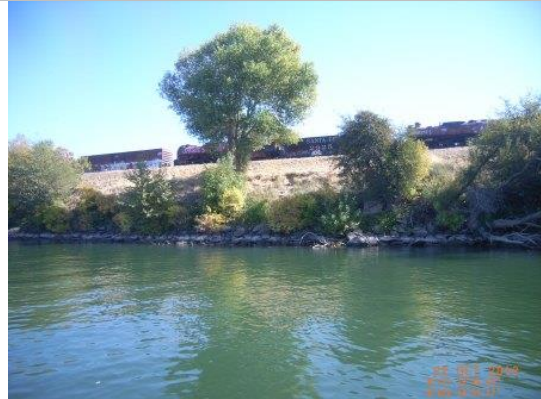
Comment Code

Inspector Comment

2008 - Oversized levee, should be repaired under maintenance. 2009 - Shallow slumps at the mid bank. 2010 - Some minor erosion at the toe, likely from wave wash. Some new shallow slumps. 2011 - One new tree has fallen. 2013 - Erosion continues on the slope surface, site extended upstream. 2015: No observed changes. [2015 Site ID: SAC_58-5_L]

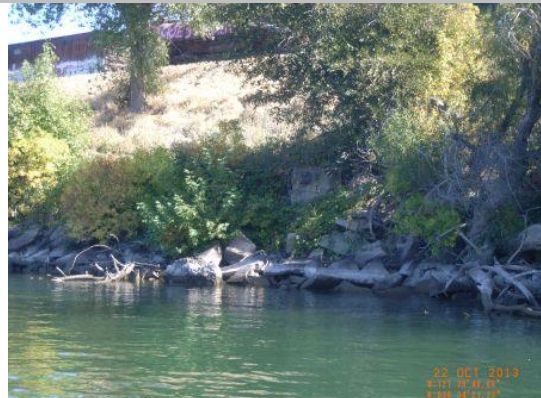
LM Start	1.31	Rating **	M	Issue No.	1 (cont)
LM End	1.39	Issue Type +	Ma	Location *	WS

Photo 1 of 2 : FA_2016_NA0005_251_1_20160913_00001.jpg



USACE 2013 Photo #1

Photo 2 of 2 : FA_2016_NA0005_251_1_20160913_00002.jpg



USACE 2013 Photo #2

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

City of Sacramento

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	3.67	09/15/2016 09/15/2016	Oleg Yakimov

LM Start	2.30	Rating **	M	Issue No.	77
LM End	2.30	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.559889 °	38.559889 °
				-121.515341 °	-121.515341 °
DWR ID	DWR_NA0005_01_f_2016_77				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_NA0005_251_77_20160915_00118.jpg



More squirrel holes found on waterward slope. Fall 2016.

LM Start	2.31	Rating **	M	Issue No.	82
LM End	2.31	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.559767°	38.559767°
				-121.515264°	-121.515264°
DWR ID	DWR_NA0005_01_s_2016_82				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : FA_2016_NA0005_251_82_20160913_00014.jpg



View of the rodent holes on the waterward side of the levee looking downstream. Spring 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---

City of Sacramento

Rodent holes with more than 2 cub ft. of soil taken out found on landside slope of the levee. Fall 2016.

No Photos

Page 6 of 8

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

City of Sacramento

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	3.67	09/15/2016 09/15/2016	Oleg Yakimov

LM Start	2.52	Rating **	M	Issue No.	84
LM End	2.92	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.556964 °	38.551504 °
				-121.513926 °	-121.511746 °
DWR ID	DWR_NA0005_01_s_2016_84				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					

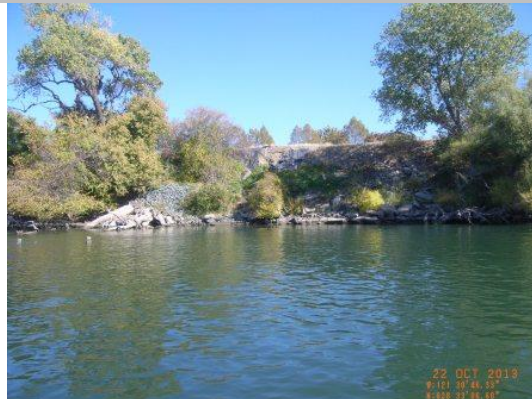
Photo 1 of 1 : FA_2016_NA0005_251_84_20160915_00120.jpg



View of landside slope. Tree trimming and vegetation removal required. Fall 2016.

LM Start	2.85	Rating **	M	Issue No.	2
LM End	2.90	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.552268 °	38.551578 °
				-121.512590 °	-121.512336 °
DWR ID	DWR_NA0005_01_s_2016_2				
Comment Code					
Inspector Comment					
1997 - Erosion at pump station, concrete debris and plastic showing. 2000 - Separation scour of bank due to poor transition. 2004 - New large tree pop out; city dumped fill dirt/rock into hole. 2006 - Minor new erosion at top of bank. 2010 - Some new rock placed in tree pop-out. 2011 - A large tree has fallen and flood fighting was performed by the city on the upper levee slope. 2012 - Small rock placed in hole from tree popout. 2015: No observed changes. [2015 Site ID: SAC_56-6_L]					

Photo 1 of 1 : FA_2016_NA0005_251_2_20160913_00003.jpg



USACE 2013 Photo #1

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	--	---	---

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

City of Sacramento

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	3.67	09/15/2016 09/15/2016	Oleg Yakimov

LM Start	3.35	Rating **	M	Issue No.	85
LM End	3.35	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.545403°	38.545403°
				-121.509830°	-121.509830°
DWR ID	DWR_NA0005_01_s_2016_85				
Comment Code					
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

LM Start	3.35	Rating **	M	Issue No.	85 (cont)
LM End	3.35	Issue Type +	Ma	Location *	LS

Photo 1 of 2 : FA_2016_NA0005_251_85_20160913_00015.jpg



View of the trees on the landward side of the levee. Spring 2016.

Photo 2 of 2 : FA_2016_NA0005_251_85_20160913_00016.jpg



Perspective view of the trees on the landward side of the levee looking downstream. Spring 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
--	---	---